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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,423	01/07/2002	Robin L. Berg SR.	2549-010-27	4681

7590

06/23/2003

Supervisor, Patent Prosecution Services
PIPER MARBURY RUDNICK & WOLFE LLP
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Washington, DC 20036-2412

EXAMINER

MEREK, JOSEPH C

ART UNIT	PAPER NUMBER
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3727

DATE MAILED: 06/23/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

Office Action Summary

Application No.

10/036,423

Applicant(s)

BERG, ROBIN L.

Examiner

Joseph C. Merek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) 4,6,7,9-30,35-37,41,43-47 and 49-72 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,8,31-34,38-40,42 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, C, subspecies II graphite (subgroup a), species I dry alarm (subgroup b), and species II plastic film (subgroup c) in Paper No. 5 is acknowledged. The traversal is on the ground(s) that there is no burden on the examiner to examine all the inventions. Applicant has not provided any evidence to support the allegation that there is no burden on the examiner. The examiner has set forth evidence that it is a burden since the inventions are distinct and have a different classification. The same argument is set forth regarding the species. This is not found persuasive because burden is not required among species. The only requirement is that the species are patentably distinct. Applicant can only traverse on the grounds that the species are not patentably distinct. See MPEP 808.01 (a) where species are covered.

Claims 4, 6, 7, 9-30, 35-37, 41, 43-47, and 49-72 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 5.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Purves in view of Seiz (DE 197 32 285). Regarding claim 1, Purves teaches the claimed structure as seen in Figs. 1 and 3, but does not teach the distal end of the trunk being on the interior of the toriod. Seitz, as seen in the abstract of the invention and in Fig. 1, teaches a Y-shaped rib for supporting tunnel tubes where the distal end of the trunk is on the interior of the toriod. It would have been obvious to reverse the ribs of Purves as taught by Seiz to provide an alternative way to form the ribs. Moreover, it would have been obvious to reverse the distal end to respond to external pressure as taught by Seiz. The structure of Seiz is underground and the pressure is external.

Claims 1, 2, 31-34, 38, 39, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al (US 5,720,404) in view of Seiz (DE '197 32 285). Regarding claims 1 and 31, Berg et al teaches a tank with toriod ribs where the ribs are U-shaped but does not teach the y-shaped rib where the distal end of the rib is on the interior of the toriod. Seiz teaches a y-shaped rib for support of underground tubes where the distal end of the y-shape is on the interior of the toriod. It would have been obvious to employ the y-shaped rib of Seiz in the tank of Berg et al to provide an alternative rib structure or to provide a rib that is shaped for underground use as taught

by Seiz. The annular material 106 is not located where the ribs are between the tank walls. See Col. 6 of Berg et al where film 106 is discussed. See the abstract of Berg et al where gutters running the length of the tank place the rib annulus in communication with the flat area or the areas where the annular material 106 is found. Regarding claim 2, see Berg et al where the ribs are made of fiberglass. Regarding claim 32, the upper surfaces of the ribs are bonded to the first wall as seen in Fig. 9, where 108 the upper end of the ribs are bonded to the first surface 102. Regarding claims 33 and 34, see Col. 9, line 1 of Berg et al where the annulus is a dry annulus and a monitor is provided to determine the presence of fluid in the annulus. The monitor has at least one sensor as known by one of ordinary skill in the art. The sensor detects the presence of fluid in the dry annulus to sound the alarm in event of a leak. Regarding claim 39, see Col. 5 lines 61-67, where the annular material is a plastic film. Regarding claim 38, the modified tank of Berg et al teaches that substitutions can be made for the annular films but does not specifically teach a fabric for the annular material. Berg et al does teach using a porous fabric for the gutters. It would have been obvious to use a porous fabric for the annular material to eliminate the need for a different material from the gutters or to as an alternative or substitute material. Regarding claim 48, the first wall of the tank is the inner wall.

Claims 3 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al in view of Seiz as applied to claims 2 and 33 above, and further in view of Humphrey (US 4,155,207). Regarding claims 3 and 40, the modified tank of Berg et al does not teach the high modulus material in the distal end of the rib. Humphrey, as

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seen in Figs. 7-12, teaches a FRP structure with a high modulus wire in the distal end of the ribs. It would have been obvious to employ the high modulus material of Humphrey in the ribs of the modified tank of Berg et al to reinforce the ribs as taught by Humphrey.

Claims 5, 8, and 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al in view of Seiz and Humphrey as applied to claims 3 and 40 above, and further in view of Callaghan et al (US 5,651,474). Regarding claims 5 and 42, the modified tank of Berg et al does not teach the high modulus material being graphite. Callaghan et al, as seen in Col. 2, lines 1 and 2, teaches reinforcing fiberglass with graphite fibers. It would have been obvious to employ the graphite of Callaghan et al in the modified tank of berg et al to provide a reinforcing material that will not rust. Regarding claim 8, see Figs. 7-12 of Humphrey, where the high modulus material is in the narrow part or trunk of the rib.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hillman and Hart are both cited for teaching high modulus materials in the trunks of ribs.

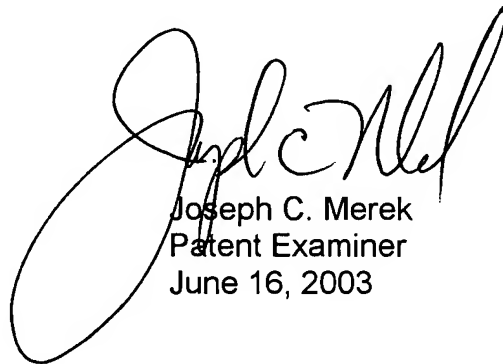
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C. Merek whose telephone number is (703) 305-0644. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (703) 308-2572. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 308-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



Joseph C. Merek
Patent Examiner
June 16, 2003